# Unit Plan Template

Click on any descriptive text, then type your own.

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| **Unit Author** | | | | | | | |
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| **Unit Overview** | | | | | | | |
| **Unit Title** | | | | | | | |
| WHOLE NUMBERS | | | | | | | |
| **Unit Summary** | | | | | | | |
| In this unit, students learn the whole numbers from 0 to 20. Mathematics is the study of quantity, structure, space and change. It plays an important role in our daily life. Therefore, it’s important to expose the use of numbers to students in order to use it correctly in their life. Within one month, students are able to memorize the numbers from 0 to 20 and can name it correctly by words. In the end of this lesson, all year 1 students can count the number from 0 to 20 and can apply it in their daily life. Besides, they are able to answer the following question: How many pencils do you have in your pencil box? Students can act as a marker to calculate the number of fan, lamp, teacher’s laptop, bookcase, books in the school bag and door in their own class. Then, they are able to calculate the number of blocks, office, computer room, laboratory, toilet and hall in the school. Write down all the information at the paper and hand it up to teacher at the end of the activity. In this activity, every student is compulsory to take part in it. When calculating the number, students can exchange their calculation to each other and compare their answer together. At last, each class is able to make a table in a manila card to show their calculation all the day. Teachers need to correct students answer if there is any mistake. Students need to complete their calculation within 45 minutes and complete the table within 10 minutes. Students will be able to answer the questions in quiz or small test that carry out during the end of the lesson. In this project Visual Raking Tool is using for arranging numbers in ascending order for whole numbers 0 to 20 in mathematics. Seeing reason tool is used for factors of not learning whole numbers in mathematics. Showing evidence tool is used for the best way to learn Mathematics.  G R A P S E D | | | | | | | |
| **Subject Area** | | | | | | | |
| Mathematics – Theme : Whole numbers : Numbers 0 to 20 | | | | | | | |
| **Grade Level** | | | | | | | |
| Year 1 | | | | | | | |
| **Approximate Time Needed** | | | | | | | |
| One months | | | | | | | |
| **Unit Foundation** | | | | | | | |
| **Habits of Learning Taxonomy** | | | | | | | |
| Recognising  Counting  Summarizing  Applying to new situation  Arranging  Emphasizing | | | | | | | |
| **Targeted Content Standards and Benchmarks** | | | | | | | |
| 1. Say the numbers 0 to 20. 2. Recognise numerals 0 to 20. 3. Count a group of objects 0 to 20. 4. Write numerals 0 to 20. 5. Read number words zero to twenty. 6. Write number words zero to twenty. 7. Arrange numbers 0 to 20: count on in ones, count back in ones, count on from a given number and count back to a given number. 8. Compare two numbers and say which is more or less. 9. Identify one more or one less. | | | | | | | |
| **Student Objectives/Learning Outcomes** | | | | | | |
| 1. Student can say the numbers 0 to 20. 2. Student can recognise numerals 0 to 20. 3. Student can count a group of objects 0 to 20. 4. Sutdent can write numerals 0 to 20. 5. Student can read number words zero to twenty. 6. Student can write number words zero to twenty. 7. Student can arrange numbers 0 to 20: count on in ones, count back in ones, count on from a given number and count back to a given number. 8. Student know how to compare two numbers and say which is more and less. 9. Student can identify one more or one less. | | | | | | |
| **Curriculum-Framing Questions** | | | | | | |
|  | | **Essential Question** | | What happen to this world without mathematics? | | |
|  | | **Unit Questions** | | 1. Why do we need to learn mathematics? 2. How do we apply mathematics in daily life? | | |
|  | | **Content Questions** | | 1. What is the arrangement of numbers from 0 to 20 in ascending order? 2. Which number is less than or more than? | | |
| **Assessment Plan** | | | | | | |
| **Assessment Timeline** | | | | | | |
| |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | |  | |  | | | **Before project work begins** | | **Students work on projects and complete tasks** | | **After project work is completed** | | |  | |  | |  | | |  |  |  |  |  |  | | * List of numbers from 0 – 20 * Infromal questioning | * Numbers with pictures * Brainstorming | * Calculate and record * Progress checklist * Informal observations by peers and teachers * Progress report | * Decorate classroom with numbers * Forms | * Calculate correctly * Product | * Scoring guide * Quiz * Small test | | | | | | | | |
| **Assessment Summary** | | | | | | |
| The teacher uses questioning to monitor student understanding in concepts of whole numbers. When brainstorming, students recall what they know about the numbers from 0-20 surrounding them and then stretching it by forming creative connection between the prior knowledge. Student can complete the list of numbers from 0 – 20 based on the pictures that given.  Students will calculate and record the numbers of object that listed in list. Progress checklist is necessary where students used to follow the specific requirements that list in the schedule. Teacher record student’s progress report through observations.  Students will go around the school and calculate the numbers of those object correctly within 10 or 15 minutes. Carry out an activity which students need to cut and paste the numbers from 0 – 20 and paste it on the wall of classroom. Teacher use the scoring guide to students in their works. Last, students will be able to answer question in quiz or small test that carry out at the end of the lesson. | | | | | | |
| **Visual Ranking Elements** (Complete this section if this tool will be used in the unit) | | | | | | |
| **Visual Ranking Project Name** (For the *Visual Ranking* workspace) | | | | | | |
| Arrange numbers in ascending order | | | | | | |
| **Project Description** (For the *Visual Ranking* workspace) | | | | | | |
| At first lesson, it’s important to recognize the numbers that had learned. To make sure you had a good memorization of the shape and the name of the numbers, you need to arrange the numbers that learned in ascending order. | | | | | | |
| **Prompt** (For the *Visual Ranking* workspace) | | | | | | |
| To test the level of recognize numbers, you should arrange the numbers in ascending order. | | | | | | |
| **Sorting List** (For the *Visual Ranking* workspace) | | | | | | |
| # # # # #  $ $ $ $ $ $ $ $  @ @ @ @ @ @ @ @ @ @ @ @  Three  4  Twenty  13  Six  ! !  9  One  + + + + + + + + + + + + + + + + +  10  \* \* \* \* \* \* \* \* \* \* \* \* \* \*  & & & & & & & | | | | | | |
| **Practice Ranking** (For your future quick reference) | | | | | | |
| Teacher ID: r1t@ | | | | | | Password: Whoknow |
| Practice Team ID 1: Apple | | | | | | Password: 12345 |
| Practice Team ID 2: Banana | | | | | | Password: 12345 |
| Practice Team ID 3: Cherry | | | | | | Password: 12345 |
| Practice Team ID 4: Orange | | | | | | Password: 12345 |
| Practice Team ID 5: Papaya | | | | | | Password: 12345 |
|  | | | | | | |
| **Seeing Reason Elements** (Complete this section if this tool will be used in the unit) | | | | | | |
| **Seeing Reason Project Name** (For the *Seeing Reason* workspace) | | | | | | |
| Factors of not learning whole numbers in mathematics | | | | | | |
| **Project Description** (For the *Seeing Reason* workspace) | | | | | | |
| In the preparation for your study of whole numbers, research the relationships between whole numbers and mathematics in general and identify what are the factor students did not learn whole numbers in mathematics. | | | | | | |
| **Research Question** (For the *Seeing Reason* workspace) | | | | | | |
| What is the reason that causes students did not want to learn whole numbers? | | | | | | |
| **Practice Map** (For your future quick reference) | | | | | | |
| Practice Team ID 1: 101 dalmations | | | | | | Password: 12345 |
| Practice Team ID 2: Cinderella | | | | | | Password: 12345 |
| Practice Team ID 3: Goofy | | | | | | Password: 12345 |
| Practice Team ID 4: Mulan | | | | | | Password: 12345 |
| Practice Team ID 5: Prince Egypt | | | | | | Password: 12345 |
|  | | | | | | |
| **Showing Evidence Elements** (Complete this section if this toolwill be used in the unit) | | | | | | |
| **Showing Evidence Project Name** (For the *Showing Evidence* workspace) | | | | | | |
| The best way to learn Mathematics. | | | | | | |
| **Project Description** (For the *Showing Evidence* workspace) | | | | | | |
| Mathematics is playing the important role in our daily life. In this project, students learn whole numbers through different types of games. | | | | | | |
| **Prompt** (For the *Showing Evidence* workspace) | | | | | | |
| What games can be use to teach Mathematics? | | | | | | |
| **Practice Case** (For your future quick reference) | | | | | | |
| Teacher ID: th3r | | | | | | Password: orange |
| Practice Team ID: Sarawak | | | | | | Password: 12345 |
| Practice Team ID: Sabah | | | | | | Password: 12345 |
| Practice Team ID: Pinang | | | | | | Password: 12345 |
| Reviewing Team ID: | | | | | | Password: |
| **Claims** | | | | | | |
| Many types of games had been created to help student improve their Mathematics skills. | | | | | | |
| **Evidence** | | | | | | |
| * Test your Mathematics skills. * Multiply fly. * Magnetic table. * Dot to Dot      * FIVE OUT * LINEUP * Math Games * Magnetic table      * Game boy * Multiply fly * Math Games * Website games | | | | | | |
| **Unit Details** | | | | | | |
| **Prerequisite Skills** | | | | | | |
| A unit on whole numbers in mathematics should be prior to this unit  Prior experience with web development software  Previous cooperative learning and Internet use | | | | | | |
| **Instructional Procedures** | | | | | | |
| Descripiton  Week 1  Teacher uses questioning to access students’ prior knowledge and to monitor their understanding of concepts on whole numbers. Students are encouraged to ask each other questions for clarification and to challenge each other students’ ideas. When brainstroming, students recall on the arrangement of numbers in ascending order. Students then stretching what they know by forming creative connection between prior knowledge and new possibilities.  Teacher uses numbers with the pictures from number 0 to 20 to assess if students understand about the numerals and justify their answers. Students can complete the list of numbers from 0 to 20 based on the pictures that are given.  Week 2  Students are asked to work on activity by using the Visual Ranking Tool. Students need to arrange numbers in ascending order by using Visual Ranking. This can help students to have a good memorization of the shape and the name of the numbers. Students will use the comment feature for each numbers to explain reasoning on why they ranked the number as ascending order. To further students in understanding the concepts of whole numbers, there are discussions made based on the question below:   * What is the arrangement of numbers from 0 to 20 in ascending order? * Which number is less than or more than?   Week 3  Students working in groups of two discuss the factors of not learning whole numbers in mathematics by using the seeing reason elements tool. They do the research of the relationships between whole numbers and the mathematics in general and identify what are the factor students did not learn whole numbers in mathematics.  Students use the checklist to help ensure they have met all of the requirements.  Students are asked to use the Showing Evidence Tool to know the best way to learn Mathematics. Students will have to do research on types of games that can be use to teach Mathematics. Students will discuss and argue on which types of games is suitable for teaching Mathematics. After the students finish putting their information into Showing Evidence, they have to review the evidences given by another group. Instruct the students to make constructive comments and corrections to claims and evidence.  Week 4  Students start to decorate classroom with the numbers that had learned in mathematics. They had known about numeral from 0 to 20. Student makes reflection and answer the main question that contain in teacher’s blog. | | | | | | |
| **Accommodations for Differentiated Instruction** | | | | | | |
|  | **Resource Student** | | Afford the students extra time for study  Reduce the amount of evidence required  Preselect research materials for the student  Provide support from a resource specialists | | | |
|  | **Nonnative English Speaker** | | Arrange for additional support from common languange speakers with greater English proficiency  Allow students to present in language of their choice  Allow more time for the students to complete their work | | | |
|  | **Gifted Student** | | Increase the amount of evidence required  All claims must be accompanied by explanations  Encourage broad and deep research | | | |
| **Materials and Resources Required For Unit** | | | | | | |

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| **Printed Materials** | Ways of learning Mathematics |
| **Supplies** | Paper, pens |
| **Technology -Hardware** | Computer, DVD player, Printer |
| **Technology -Software** | Microsoft Word, Internet browser, email, desktop publishing and web page development software. |
| **Internet Resources** | <http://www.woodlands-junior.kent.sch.uk/Games/Mathsquiz.html>  <http://www.suite101.com/content/math-skill-games-with-dice-a11454>  <http://www.woodlands-junior.kent.sch.uk/maths/timestable/magnetic/4times.html>  <http://www.woodlands-junior.kent.sch.uk/Games/dot/todot.html>  <http://www.learningsuccess.com/ten_sample_math_games.htm>  <http://www.learningsuccess.com/ten_sample_math_games.htm>  <http://www.quiz-tree.com/Math_Games_smain.html>  <http://www.woodlands-junior.kent.sch.uk/maths/timestable/magnetic/4times.html>  <http://www.flashmaster.com/multiplication_table/multiplication_tables.htm>  <http://www.suite101.com/content/math-skill-games-with-dice-a11454>  <http://www.quiz-tree.com/Math_Games_smain.html>  <http://www.dimensionu.com/pearson/home/default.aspx> |
| **Other Resources** | Peers, parents and teacher. |

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